

***Corydalis aquae-gelidae* Peck & Wilson**

Clackamas corydalis  
Fumariaceae (Fumitory Family)

**Status:** State Sensitive, USFWS Species of Concern

**Rank:** G3S2S3

**General Description:** Perennial from deep-seated, fleshy roots, the stems succulent and strongly fistulose, 12 to 44 inches tall, simple to branched; leaves several, yellowish-green, glaucous on the lower surface, the lower cauline ones up to 24 inches long often equaling the racemes, from 4 to 6 times pinnate, the ultimate segments very numerous, more or less elliptic, mostly  $\frac{3}{16}$  to  $\frac{1}{2}$  inch long and  $\frac{1}{16}$  to  $\frac{3}{16}$  inch broad; racemes simple to well compounded, conspicuously bracteate, rather compactly 30 to 60 flowered, ultimately elongate and up to 9 inches long; corolla  $\frac{1}{2}$  to  $\frac{3}{4}$  inch long, pale to deep pinkish with a slight trace of purple, the inner petals more deeply colored at the tip; spurred petal conspicuously crested, usually without free margins or the margins very slightly upturned; spur  $\frac{3}{8}$  inch long; capsule ellipsoid,  $\frac{3}{8}$  to  $\frac{1}{2}$  inch long, about  $\frac{1}{3}$  as thick, the style  $\frac{1}{4}$  to  $\frac{1}{2}$  as long; seeds about  $\frac{1}{16}$  inch long.

**Identification Tips:** *Corydalis scouleri* occurs within the range of *C. aquae-gelidae*. *C. aquae-gelidae* has shorter ultimate leaf segments ( $\frac{3}{16}$ - $\frac{1}{2}$  inch versus  $\frac{3}{4}$ - $3\frac{1}{4}$  inches), more flowers per raceme (30-60 versus 15-30), and a smaller flower ( $\frac{3}{8}$ - $\frac{3}{4}$  inch versus  $\frac{3}{4}$ - $1\frac{1}{4}$  inch) than *C. scouleri*.

**Phenology:** The flowering period for this species is long, lasting from June to September. Plants may senesce in late August or September, often somewhat early compared to other species in the area. Phenology seems to be controlled by microsite warmth.

**Range:** Regional endemic; Clackamas and Multnomah counties, OR to Clark and Skamania counties, WA in the Western Cascades physiographic province.

**Habitat:** Occurs primarily in the western hemlock (*Tsuga heterophylla*) and Pacific silver fir (*Abies amabilis*) zone, (Franklin and Dyrness 1973), at elevations ranging from 2500 to 3800 feet. It is found growing in or near cold flowing water, including seeps and small streams, often occurring within the stream channel itself.

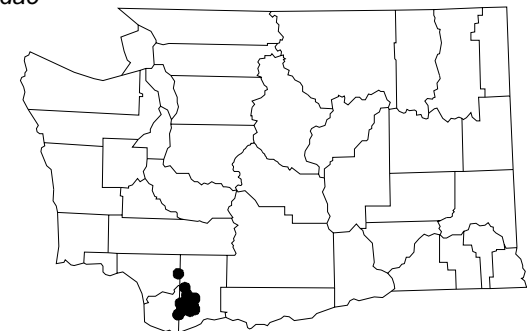
***Corydalis aquae-gelidae***

Clackamas corydalis



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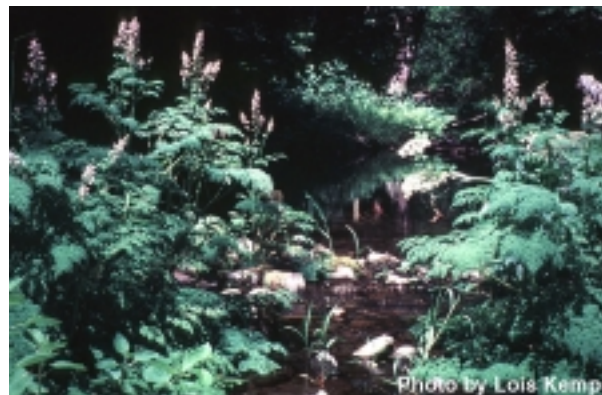
Known distribution of  
*Corydalis aquae-gelidae*  
in Washington



● Current (1980+)  
○ Historic (older than 1980)

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**Ecology:** Current information suggests that *C. aquae-gelidae* prefers intermediate levels of overstory canopy closure which provide enough light for flowering and reproduction, yet not so much light that a dense cover of shrubs develops.

**State Status Comments:** The small range and specific habitat requirements are the primary factors contributing to the species' status.

**Inventory Needs:** Additional inventory is needed throughout appropriate habitats in Clark and Skamania counties, WA.

**Threats and Management Concerns:** Timber harvest, road construction and other activities that may alter the hydrologic regime are the greatest threats to the taxon. Roadside spraying has posed a threat to some populations in the past.

**References:**

Hitchcock, C.L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1964. *Vascular Plants of the Pacific Northwest, Part 2: Salicaceae to Saxifragaceae*. University of Washington Press, Seattle. 597 pp.

Jolley, R. 1988. *Wildflowers of the Columbia Gorge*. Oregon Historical Society Press. 331 pp.